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| APPLICATION NO |). I | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------|-----------|---------------|----------------------|---------------------|------------------|
| 10/003,563 | | 10/24/2001 | Craig Hemsing | 13158U\$02 | 5055 |
| 23446 | 7590 | 03/15/2005 | | EXAMINER | |
| | | ELD & MALLOY, | MOAZZAMI, NASSER G | | |
| 500 WEST SUITE 34 | | N STREET | · | ART UNIT | PAPER NUMBER |
| CHICAGO | D, IL 606 | 61 | | 2187 | |

DATE MAILED: 03/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| , | | Application No. | Applicant(s) | | | | |
|---|--|--|---|--|--|--|--|
| | | 10/003,563 | HEMSING ET AL. | | | | |
| | Office Action Summary | Examiner | Art Unit | | | | |
| | | Nasser G Moazzami | 2187 | | | | |
| Period fo | The MAILING DATE of this communication ap or Reply | pears on the cover sheet with the o | correspondence address | | | | |
| A SH THE - Exte after - If the - If NO - Faill Any | MAILING DATE OF THIS COMMUNICATION. ensions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a replot of the period for reply is specified above, the maximum statutory period reply within the set or extended period for reply will, by statut reply received by the Office later than three months after the mailing period patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply be tin oly within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDONE | nely filed /s will be considered timely. Ithe mailing date of this communication. ED (35 U.S.C. § 133). | | | | |
| Status | | | | | | | |
| 1) ズ | Responsive to communication(s) filed on 22 F | February 2005 | | | | | |
| | | s action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the me | | | | | | | |
| ۔ ر | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposit | ion of Claims | | | | | | |
| 5)□ 6)⊠ 7)□ | Claim(s) 1-26 is/are pending in the application 4a) Of the above claim(s) is/are withdra Claim(s) is/are allowed. Claim(s) 1-26 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or | awn from consideration. | | | | | |
| Applicat | ion Papers | | | | | | |
| 9)[| The specification is objected to by the Examine | er. | | | | | |
| 10)[|)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | | |
| | Applicant may not request that any objection to the | drawing(s) be held in abeyance. See | e 37 CFR 1.85(a). | | | | |
| | Replacement drawing sheet(s) including the correct | ction is required if the drawing(s) is ob | jected to. See 37 CFR 1.121(d). | | | | |
| 11) | The oath or declaration is objected to by the E | xaminer. Note the attached Office | Action or form PTO-152. | | | | |
| Priority ι | under 35 U.S.C. § 119 | | | | | | |
| , | Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Burea | ts have been received. ts have been received in Applicati prity documents have been receive | ion No | | | | |
| * \$ | See the attached detailed Office action for a list | t of the certified copies not receive | ed. | | | | |
| | | | , | | | | |
| Attachmen | • • | Λ.Π . | (DTO 440) | | | | |
| _ | ce of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) | 4) Interview Summary Paper No(s)/Mail Da | | | | | |
| 3) 🔲 Infon | mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date | 🗖 | Patent Application (PTO-152) | | | | |

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DETAILED ACTION

Response to Amendment

- 1. This is in response to amendment filled by applicant on 02/22/2005.
- 2. No claims has been added or canceled.

Response to Arguments

3. Applicant's arguments filed 02/22/2005 have been fully considered but they are not persuasive.

Applicant's arguments are:

- (a) Differentiating the overlays into a code portion and into a data portion is not the same as splitting a segment of code into a controlling piece of code and a working piece of code.
- (b) Sherman does not disclose a hardware transfer mechanism for efficiently linking the storage area with the first memory.
- (c) The digital signal processor is associated with the network telephone device.

As in regard to (a) Merriam Webster's Collegiate Dictionary, tenth edition define "differentiate" as to become distinct and the Microsoft Press Computer Dictionary Third Edition defines "overlay" as a section of a program to reside on a storage device. As it is clear from the above definitions differentiating the overlays into a code and data portions is the same as splitting a segment into a controlling and working codes.

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As in regard to (b) in order to transfer data from one storage to another, there has to be a link to do so. Furthermore, Andrew S. Tanenbaum in structured Computer Organization, second edition, page 11, states that hardware and software are logically equivalent.

As in regard to (c) both Chin (US Patent No. 6608625) and Jacobs (US Patent No. 6385678) clearly disclose the processor is being used in multimedia system (see Chin's abstract and Jacobs's column 1, lines 12-25 and column 4, lines 8-17).

Therefore, the rejections of the claims deemed to be proper.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Sherman et al. (U.S. Patent No. 5,175,830), hereinafter Sherman.

As per claim 1, Sherman discloses an apparatus for reducing the memory footprint of a first processor device, the apparatus comprising: a segment of program code which is split into portions including at least one controlling piece and at least one separate working piece; a storage area for storing certain pieces of the program code; a first memory area associated with the first processor device for receiving certain

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portions of the program code; and a hardware transfer mechanism for efficiently linking the storage area with the first memory area, wherein the memory footprint of the first processor device is reduced by locating certain controlling pieces of the program code in the storage area, and transferring only certain working pieces of the program code in the first memory area [differentiating overlay into a code portion and a data portion, storing the data portions within the firs memory and the code portions within a second memory (column 1, lines 65-67); allocating a code area and data area within main memory and storing the data and code portions within the allocated areas (column 2, lines 6-27); a load and control system determines which program or overlays stored on a mass storage and are to be loaded in support of a particular application program being run (column 3, lines 38-60)].

As per claims 2-12, Sherman teaches that the storage area includes a second memory area associated with second processor device [controller for accessing the disk 9 (see Fig. 2)]; Sherman further discloses first and second memories and swapping a required code portion from the second memory into the first memory for execution by the CPU; a load and control system for determining which program or overlays to be loaded from the mass storage in support of a particular program being run and copying the stored and relocated code portion to the expanded memory [column1, line 65 through column 2, line 27; column 3, lines 38-50; and it is inherent in the art that the mass storage is a low cost memory than the main memory].

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As per claims 13-26, claims 13-26 encompass the same scope of the invention as those of claims 1-12 in addition of performing the steps method and some units for performing the functions. Therefore, claims 13-26 are rejected for the same reasons as stated above with respect to claims 1-12.

6. Claim 26 is rejected under 35 U.S.C. 102(e) as being anticipated by Chin et al (U.S. Patent No. 6,608,625) or Jacobs et al. (U.S. Patent No. 6,385,678).

As per claim 26, Chin or Jacob teach a processing unit associated with the network telephone device and having a cache memory; and SDRAM; and an arbiter configured to exchange code and data between the SDRAM and the cache memory [for chin's patent see column 12, line 59 through column 13, line 57; and for Jacob's patent see column 3, line 61 through column 4, line 7].

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

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than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Nasser G Moazzami whose telephone number is (571)

272-4195. The examiner can normally be reached on 7:00AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

9. Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

NASSER MOAZZANII PRIMARY EXAMINEP

03/09/2005